

## CENTRAL INTELLIGENCE AGENCY

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25 YEAR RE-REVIEW

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INFORMATION REPORT INFORMATION REPORT

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REPORT [REDACTED]

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COUNTRY Czechoslovakia

DATE DISTR. 26 Sept. 1955

SUBJECT Chemical Warfare Equipment and Training

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PLACE ACQUIRED [REDACTED]

**THIS IS UNEVALUATED INFORMATION**

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**EQUIPMENT****Altered New Czechoslovak Gas Mask**

1.

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[REDACTED]

All of the units stationed at Mlada Airfield were issued the same mask in or about September, when [REDACTED] it being worn during the monthly "chemical alert" (Chemicky poplach).<sup>1</sup>

[REDACTED]

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2. Facepiece: The facepiece was light brown (tan), had a smooth finish and was hood type with two plain glass eyepieces. The exterior outlet valve was black plastic, rectangular with plastic bars to protect the diaphragm [REDACTED] two centimeters high, 1.5 cm. wide, and with rounded edges. The hose connected to the facepiece, but [REDACTED] did not know what the interior of the connection was like. [REDACTED] the eyepiece would fog in cold weather but cleared when air was inhaled. [REDACTED]

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containing paper poison gas detecting blocks were stored in one of the wooden boxes containing the chemical warfare combat alert equipment (See page 7).

19. Gas Detecting Powder: Once during regular warfare training at Mlada Airfield [ ] shown a container about 50 to 60 cm. long, which was circular in shape and approximately 20 cm. in diameter. About 10 cm. of the lower end of this container were shaped into a funnel. This funnel had openings patterned after an ordinary water can sprinkler to dispense the enclosed powder. The entire container was painted OD and was provided with a webbed handle at the top. [ ]

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The powder stored in this container was rose in color (between orange and red) and, as the instructor explained, it would be sprinkled on a suspected contaminated area by one of the members of the chemical warfare squad. Upon contact with poison gas it would change into an unknown but different color. One such container was enclosed in one of the wooden boxes containing the chemical warfare "combat alert" equipment.

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20. Chemical Warfare First-Aid Kit: Members of [ ] unit were not issued any chemical warfare first-aid kits, but during one chemical warfare class, Lt. Ciglan mentioned that every man would be issued one upon arrival at Mlada Airfield. This shipment was expected sometime in the fall of 1954, but this never materialized [ ]

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#### Storage of Chemical Warfare Items

#### 21. At Battalion Supply Area:

- a. Beside the five wooden boxes containing "combat alert" equipment, [ ] the following items stored in their battalion chemical warfare supply area on an open shelf: about 300 new gas masks (same type as those issued to all Mlada Airfield personnel) and about 400 - 500 filters; a silver-colored, metal container (cylindrically shaped) equipped with one web handle on each side. In this container was what appeared [ ] to be a ready mixed lime and about five silver-colored cylindrical metal cans, without any inscription and of about a five liter capacity. [ ] these cans contained material for decontamination of weapons.

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- b. Next to the chemical warfare supply room, in an open shed, were stored approximately 40 to 50 metal drums, approximately 60 cm. tall and 30 cm. in diameter. These drums were reddish-brown in color. They had small apertures (bungholes) on their sides. [ ]

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Lt. Ciglan state on one occasion that they contained smoke acid (kyselina dymova).

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- c. Approximately once a month, five or six Messerschmidt 109 airplanes of the 6th Fighter Regiment, Mlada Airfield, practiced screening their Airfield firing range, commonly referred to as "letecka strelnice".<sup>3</sup> The smoke screening exercise lasted, usually, half a day, when airplanes individually flew over the predetermined and marked-off area. [ ]

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It was the duty of the members of [ ] chemical squad of the 22nd Airfield Battalion to service these planes with the smoke acid. The smoke acid was carried in cigar-shaped containers underneath the wings.<sup>4</sup>

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The size of the mask was marked under the chin, the figures being within a circle on the left side. The sizes were 1.5, 2, 3 and 4, 1.5 being the smallest and 4 the largest. The face also had a slight nose protrusion and a raised portion for the ear.

3. Hose: The hose was of corrugated black rubber and one meter long. The end which coupled to the canister had a female coupling with raised portions for tightening the connection. The coupling was made of dark-colored strong plastic. The hose connected to the facepiece with a steel band. Its diameter was 3.5 cm.
4. Canister: The canister was round, of dark green metal (tin), approximately 10 cm. high and 13 cm. in diameter. The inlet opening was on the bottom of the canister and was sealed with tape when not in use. The outlet opening in the top of the canister was unscrewed from the hose and covered with a cap. The service life of the canister was not known

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canister had a mechanical filter consisting of tubes of silver, black and white absorbing material. Each color signified a different tube function. [redacted] had seen the bisected model in the classroom and knew that air passed through the tubes, but the actual flow of air was unknown. The instructor stated during instruction that the canister was made somewhere in Czechoslovakia (exact location unknown [redacted]). In addition to protecting against chemical agents, the canister would filter out biological particles, according to the instructor.

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5. Gas Mask Carrier: The carrier was grey-green in color and made of strong, treated waterproof linen. It was 13 cm. wide, 20 cm. long, and 25 cm. high. The material was stiffened cloth strong enough to keep its shape, similar to the case of the EE-8 telephone. The carrier had two large compartments for carrying the face piece and canister, the canister compartment being slightly larger. Two canisters could be carried in this compartment. The other large compartment was for the facepiece and hose. There was also space in the carrier for a protective cape. The cover was flexible and equipped with a snap to secure it. The carrying strap was five centimeters wide with ends sewn to the carrier. Its length was adjusted by means of a buckle. The waist strap was 1.5 cm. wide and consisted of two pieces tied together to keep the carrier close to the side. (For a [redacted] sketch of the new protective mask carrier, see Enclosure.)

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#### Protective Cape

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6. When the new gas masks were issued in September 1954, EM of [redacted] battalion were also issued new protective capes (plastenka) at the same time. (This article was of the standard issue type, which [redacted] had also been issued earlier at Dolny Kubin, and appeared to be unused.) [redacted]

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7. The protective cape was made from a stiff, impregnated, paper-like material very black green in color, fire resistant (oddolna ohni) but smelling like paraffin. It was a flat sheet about 2 x 1.5 m. in size which could be folded into a small package about the same size as the carrier but only one inch thick. [redacted] instructor at Dolny Kubin stated that it would protect the wearer from a flame-thrower at distances of 50 m. or more.

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8. During basic training in Dolny Kubin, pilot cadets were taught how to roll and get under the cape. They were also told that if necessary they could tear it in half and wrap their legs with it to walk through an area gassed with dew gas.

#### Decontamination Suit

9. [redacted] rubber decontamination suits twice at Mlada, during regular chemical warfare weekly instruction class. One such suit was first donned by the instructor himself, Lt. Ciglan. This he donned over his regular uniform trousers and shirt. Later three to four other IM selected from the class (not members of the chemical squad) had to put them on and try to walk in them a distance of about 15 m. (See page 10, for a sketch of the suit.)
10. These rubber suits were one-piece types, including boots. Rubber gloves, of five finger type reaching up to the elbow, were put on separately. Draw strings were provided at the "turtle neck" collar (about seven centimeters high), at the end of the sleeves, around the waist and above the ankles. In back of the suit there was an opening from the neck down to about the waist. The upper half of this opening was provided with buttons, while the lower half had open-eye hooks for laces. The entire length of the opening, neck to waist, was overlapped by a rubber flap. Every man had to be assisted in donning this rubber suit.

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11. [redacted] estimated its weight at about four kilograms. It was made of grey-blue rubber about two to three millimeters thick, with a grey canvas lining. [redacted] did not believe it was treated with any special chemical, since it did not have any peculiar odor to it. He did not notice any possible additional filters or other special equipment as part of these suits.

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12. The regular gas mask was used with these rubber suits. [redacted]

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#### Decontamination Truck

13. In the summer of 1954, a new decontamination truck was assigned

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This truck, according to Lt. Ciglan, was to be operated and maintained by their "chemical-warfare squad". It had three axles, two rear and one front. The two rear axles had dual wheels. The body consisted of drivers cab, pumps, hose and two tanks. Its tanks would hold approximately 3,000 to 4,000 liters of some fluid unknown. The top half of the tanks were white and the rest were OD; the truck body was also OD in color. [redacted] the truck [redacted] according to Lt. Ciglan it was to be used for decontamination of terrain.

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14. During one of the chemical warfare classes, Lt. Ciglan mentioned that they were going to have one demonstration on the use of this new truck in the fall of 1954.

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#### Chemical Warfare "Combat Alert" Equipment

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This "combat alert" equipment was stored and kept in readiness in about five large wooden unpainted boxes, each of which was approximately 150 x 60 x 30 cm. The contents were indicated on the top of these boxes by printed letters of red paint. The boxes themselves were kept in the unit's chemical warfare area.

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16. an opportunity to see the contents of three of these boxes. One contained extra gas masks (new type, as issued to everyone at Mlada Airfield) and extra protective capes. The second box contained four rubber suits for use during decontamination of gassed areas, as well as about 40 "chemical flags" (chemické praporeky) used to mark off a contaminated area. (The actual prescribed number of rubber suits per unit was unknown.) The third box contained paper gas detector blocks and material for decontamination of weapons and terrain.

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#### Chemical Flags (Chemické praporeky)

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The staffs of these flags were made of thick wire rods, painted red and pointed on the lower end as an aid to posting. They were about 60 cm. long. It was possible to insert one "chemical flag" staff on top of another, in case an area with a lot of bushes and high grass was marked, in order to make the flags more visible. The flags attached to these wire staffs were made of stiff canvas and were approximately 15 x 15 cm. in size. (See page 10). They were of two colors, red and yellow, each one having a crossed skull and bones in black painted upon them.

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Only red flags were used in the demonstration. The purpose of this demonstration was to familiarize troops in the employment of "chemical flags" with instructions to stay out of an area thus marked. No particular type of war gas was mentioned.

#### Other Equipment Items

18. Paper Gas Detectors: The chemical squads, according to the chemical warfare instructor at Mlada Airfield, generally had had several aids in detecting contaminated areas. These were detecting paper blocks (detecni bloky) and detecting powder (detecni prasek). The detecting paper blocks (presumably litmus paper, ) were pieces of paper approximately 5 x 3 cm. in size. About 30 pieces of such paper were bound in a booklet, from which they were torn out as needed. This paper would change color upon contact with poison gas, and with the aid of a chart poison agents would be identified according to the color it changed to. They were in two separate colors, red and blue.

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The blocks of this detector paper were stored in a wooden box painted grey and approximately 40 x 30 x 15 cm. in size. The box was also equipped with a carrying strap to enable a member of the chemical squad to carry it suspended in front of his chest. Two such boxes

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## 22. At Billet Areas:

The airmen at Mlada Airfield stored their assigned protective masks in the weapons racks located in the hallway of their billets and near the squad rooms. Everyone kept his assigned SMG as well as his gas mask in these racks. The masks were only placed on the open-rack shelf underneath the individual's weapon (name plates being provided), while the SMG's were secured and locked by means of a long rod running through the trigger guards. A 24-hour guard of these racks was maintained by the company CQ, who had his desk located at one end of the hallway.

## TRAINING

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At Pilot Training Center (LU - Letecke uciliste) in Dolny Kubin  
(M 49-12, E 19-18)

23. Classroom Training: [ ] 12 hours of chemical warfare training per week during basic training while stationed at Dolny Kubin from October to December 1952. The gas mask was carried twice a week during basic training hours. The instructor was the chemical officer of the staff. Approximately two-thirds of the time was spent on chemical agents, protective measures and gas mask drill. Chemical agents were identified by color, odor, and physical effects. The other third was spent on practical work in the field. Chemical warfare classes [ ] never included civilians, neither at Dolny Kubin nor at any other subsequent assignments and locations.

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24. Exercises and Demonstrations: Open-air chemical exercises were held both at Dolny Kubin (November 1952) and at Mlada (August 1954). According to the instructor, phosgene gas was used. In both exercises five out of 30 individuals were hospitalized from three to five days and everyone complained of headaches. Old German gas masks were used in the exercise. The phosgene gas was disseminated by burning from a container approximately 15 cm. high, 10 cm. in diameter and dark green color. The dissemination of this phosgene gas was started by lighting with a match the ignitor with which the container was equipped and which was located on the top cover. Within 10 seconds the smoke started to ascend and fill the surrounding area.

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[ ] This was a portable spray tank holding approximately 30 liters of liquid. Lime and water were used [ ]

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[ ] After spraying a path a rake was used to stir up the soil. No gas chamber exercises were held [ ]

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## 25. Theory of Gases:

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[ ] there were the following classes of war gases. [ ] each class had at least two chemical agents:

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TypeUses and Characteristics

Tear gas (slzotvorny)

Choking gas (dusiv):

Phosgene

Smoke dark yellow when coming from container but white when dispersed.

Diphosgene

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Smoke gas (dymovy)

Used for cover and concealment. Dark red used for identification.

Lung irritants (drazuivny)

Poison gas (otravnny)

Carbon monoxide was one type.

Nerve gas (nervovy)

[redacted] recalled that nerve gas affected principally brain tissues and paralyzed the brain, but it could also affect other parts of the body. No statements were made during training as to which powers, including Czechoslovakia, possessed this gas.

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At Mlada Airfield

26. [redacted] the 22nd Airfield Battalion at Mlada Airfield from October 1953 to December 1954, chemical training was conducted by the unit chemical warfare officer, Lt. Ciglan, or by his assistant Cpl. Majersak (fnu) (compulsory service). Lt. Ciglan never made any references to special chemical warfare courses he may have attended, but Majersak often mentioned the "chemical course" he had attended.

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## 27. Periodic Training:

- a. Daily: Chemical warfare training was conducted before work daily from 0810 to 0900 hours, except on Saturdays and Sundays. EM went through one of the following exercises: marching with a donned gas mask, donning and removing the gas mask; dry firing SMO with gas mask on, or the use of the protective cape (plastenka).

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- b. Weekly: Aside from the daily 45 minute chemical warfare training, [redacted]

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One-third of this chemical training was devoted to identifying chemical agents, first aid and self first aid. The other two-thirds were devoted to field problems and protective mask drill (time for putting mask on was 12 seconds). All instruction was attended only by military personnel.

- c. Monthly: Once a month, a class lasting about three hours was conducted on decontamination of weapons and terrain. For decontamination of weapons, a white, vaseline-type grease of unknown composition, which came in five-liter metal containers was applied to weapons with a brush. Then it was wiped off with rags, which were subsequently buried. After the weapons were wiped off, an oily liquid was applied with a brush.

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[redacted] Demonstration personnel wore rubber apron and gloves.

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## 28. Chemical Warfare Alerts:

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- a. From July 1954 [redacted], a "chemical alert" (chemicky poplach) was held at Mlada Airfield approximately once a month. This exercise was not carried out on a certain designated date but irregularly. When such a chemical alert was called, (originating headquarters unknown [redacted]), the various sections where Mlada Airfield personnel worked, or were quartered, were notified by telephone.

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- b. The alert generally began at 0815 hours and ended at noon. Everyone including pilots and officers was obliged to wear his gas mask over his face and carry on normal duties, including the use of telephones. The proper wear of protective masks was checked by the battalion commander, one of the Airfield staff officers and the regimental and battalion political officers.
- c. The CW "combat alert" supplies were loaded into a Skoda, three-ton capacity, two-axle, truck. There was a designated truck which picked up the chemical warfare supplies, and its assigned driver (member of the Transportation unit) always automatically drove it to the chemical warfare supply area during "combat alert" exercises.
- d. After loading of the truck, the unit chemical officer and his assistant, with the members of the chemical squad, mounted the truck carrying their field equipment and joined the other trucks which comprised the "combat alert" convey.
- e. About 20 vehicles made up the convoy. Each unit stationed at Mlada Airfield held their "combat alert" separately, on different days, never in conjunction with some other unit. In the majority of cases, Skoda three-ton capacity, two-axle trucks were used. Drivers of these vehicles were members of each unit's transportation section.

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## 29. Decontamination Exercise:

Generally only one of the following weapons were used in weapons' demonstrating decontamination: a pistol, SMG, LMG or a MMG. These weapons were assigned to [ ] unit.<sup>5</sup> Training methods were as follows. First the chemical warfare instructor would demonstrate the procedure for decontaminating the weapon used in demonstration. After that, several EM were called out individually to repeat the entire process. This exercise was carried out only to familiarize EM with the procedure; but in actual combat, according to Lt. Ciglan, there would be a designated location somewhere in a rear area where contaminated weapons would be decontaminated by a special crew not further defined.

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## 30. Gas Chamber Exercises:

[ ] unit went through a gas chamber exercise (plynova komora) sometime in August 1954. There was a permanent gas chamber located at their airfield. It was a wooden building, approximately 7 x 5 m. in size and located near the wooded area which partly surrounded the airfield.

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[ ] from conversation with other airmen [ ] gathered that individuals had to remain a certain length of time in the gas chamber with protective masks donned. Time limit for this was unknown [ ] He heard that all airfield units went through the same exercise during August 1954. [ ] did not know more details on the "gas chamber" or the training exercise itself.

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## 31. Chemical Warfare Squad:

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The 22nd Airfield Battalion had an eight-man chemical warfare squad, the members of which received an additional one to two hours of chemical warfare training each week. This was given personally by

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the chemical warfare officer and consisted of a repetition of material covered during the normal weekly chemical warfare instruction for all personnel.

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4.                      Comment: This "smoke acid" was probably ferrous  
sulfate.

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**Enclosure: Alleged New Czechoslovak Gas Mask and Gas Mask Carrier**

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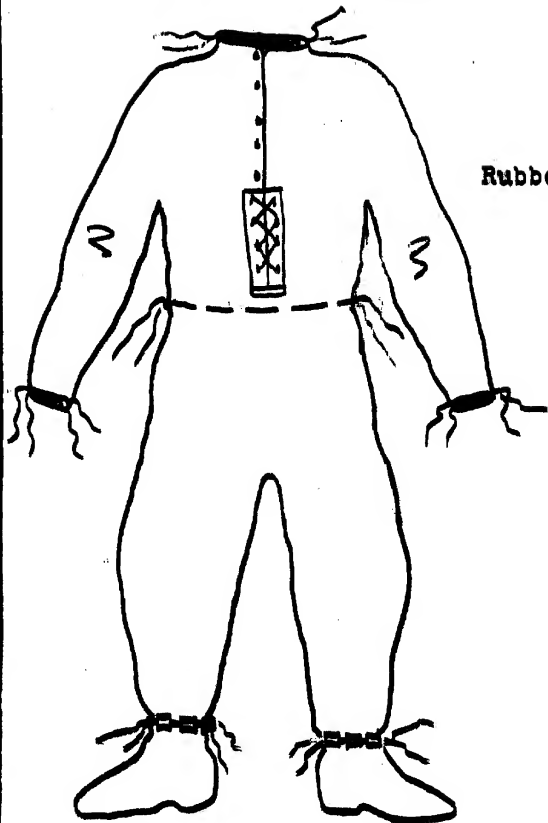
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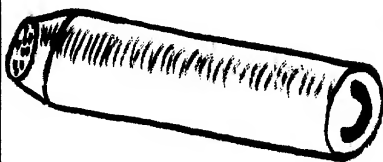
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Sketch of Some of the Chemical Equipment Utilized by  
The 22nd Airfield Battalion at Miada Airfield

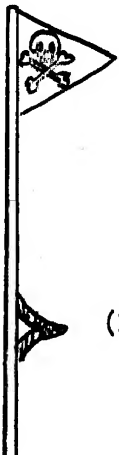
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Rubber Decontamination Suit



Metal container used for dissemination of war-gas detecting powder. (The bottom opening was provided with a separate clamp-on type metal cover, and was covered when not in use.)



Chemical Flags (Chemické praporky)

(Handle)

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